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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/252,034 02/18/99 HOSHINO

S WN-1979

000466 WM31/0223
YOUNG & THOMPSON
745 SOUTH 23RD STREET 2ND FLOOR
ARLINGTON VA 22202

EXAMINER

AHMED, S

ART UNIT	PAPER NUMBER
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2623

DATE MAILED:

02/23/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/252034 Applicant(s) Satoshi Hoshino
Examiner S. Ahmed Group Art Unit 2623

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 12/1/00
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 8-25 is/are pending in the application.
- ☐ Of the above claim(s) is/are withdrawn from consideration.
- ☐ Claim(s) is/are allowed.
- ☒ Claim(s) 8-25 is/are rejected.
- ☐ Claim(s) is/are objected to.
- ☐ Claim(s) are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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1. The amendment filed 12/1/00 have been entered and made of record.
2. In response to Applicant's amendment filed 12/1/00 the objection to claim 15 under 37 CFR 1.75 © is withdrawn.
3. Applicant has canceled claims 1-7 and added new claims 20-25. Applicant's arguments filed 12/1/00 with regard to claim 20-25 have been fully considered but they are moot in view of new grounds for rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 8-19 and 20-25 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 20, recites “ and permitting movement of the contact surface below the detent position when pressure on the contact surface is greater than the first pressure”, lines 11-14.

There is no disclosure in the specification as originally filled of a restraint having a detent position at a depressed location of the contact surface and that permitting movement of the contact surface below the detent position when pressure on the contact surface is greater than the

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first pressure nor how to perform. The specification discloses that the contact surface moves downward when the fingertip is placed on the contact surface and moves upwards when the fingertip is removed. when the contact surface is pushed down to the lock mechanism (predetermined position) it is locked by the lock mechanism (see specification, page 6, lines 9-17, page 7, lines 6-17).

As to claim 8-19, 21-25, refer to claim 20 rejection.

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “ restraint permitting movement of the contact surface below the detent position when pressure on the contact surface is greater than the first pressure” (refer to paragraph 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akihiro Shimizu, et al. [Japanese Laid-Open Publication No. 58-201178] in view of Tetsuya Nishiki [Japanese Laid-Open Publication No. 64-68894].

As to claim 20, Shimizu discloses a device for detecting a fingerprint of a fingertip placed on a contact surface that moves up and down and is part of a fingerprint input section, the device comprising:

a moving element opposing downward movement of the contact surface when the contact surface is pressed downward by a fingertip whose fingerprint is to be detected [spring 3, permits the prism 2 to move when finger 1 is pressed against the prism (see Fig. 1, page 4, lines 4-20)];

a restraint urging the contact surface to remain in a predetermined position when a predetermined pressure [a first pressure] is applied to the contact surface by a fingertip and permitting movement of the contact surface below the predetermined position when pressure on the contact surface is greater than the first pressure and above the predetermined position when pressure on the contact surface is less than the first pressure [the contact surface 2 stops at a predetermined position when a predetermined pressure [a first pressure] is applied to it and that permits detection of the fingerprint, the contact surface 2 is permitted to move below the predetermined position when pressure on the contact surface is greater than the first pressure, and above the predetermined position when pressure on the contact surface is less than the first pressure (the finger is removed from the surface) (Fig. 2a) also Fig. 2b shows the detection of a fingerprint when a pressure of a predetermined range is applied to the contact surface]; and

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a detecting unit detecting a fingerprint on the contact surface when the contact surface is in the predetermine position [when the prism 2 is stopped by the metal embodies 11A and 11B at a certain range, the pressure sensitive part 4, is switched on and a signal is sent to a controller to drive an image sensor part 7 to capture a fingerprint image (Fig. 1, page 4, line 4-page 5, line 12)].

Shimizu does not disclose that the restraint having a detent position at a depressed location of the contact surface and urging the contact surface to remain in the detent position when a first pressure is applied to the contact surface.

Nishiki discloses a fingerprint detection device comprises a transparent body 2 such as a prism (contact surface), a support unit 3 for the transparent body 2, a slide unit 3' that supports the support unit 3 so as to be movable in a set direction, a spring 4 that controls the movement of the transparent body 2 (page 4, lines 14-26, Fig. 1). When the finger 1 is pressed atop of the surface 2a, the horizontal partial force 11 of the press force 10 from the finger pressure overcomes the force of spring 10, pulls support unit 3 towards the position of detector 5, and after moving a certain distance support unit 3 of the transparent body 2 comes into contact with the detector 5 that is provided in the position of slide unit 3'. At the time when detector 5 and support unit 3 contact, the movement of the transparent body 2 is stopped at that position and detector 5 is turned on [restraint having a detent position at a depressed location of the contact surface and urging the contact surface to remain in the detent position when a first pressure is applied to the contact surface] (page 5, lines 12-20, page 6, lines 1-12). It would have been

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obvious to one having ordinary skill in the art at the time the invention was made to use Nishiki's teachings to modify Shimizu's device by using a restraint having a detent position at a depressed location of the contact surface and urging the contact surface to remain in the detent position when a finger applies a pressure to the contact surface in order to prevent deviation of the pressure applied by the fingertip onto the scanning surface such as in cases of elderly people, infants, people with injuries, or sick individuals who cannot maintain adequate pressure and balance and prevent generating large differences in the fingerprint images from a fingerprint-characteristic standpoint so that the image of the fingerprint will be imaged in a fixed form every time.

As to claim 21, Nishiki further discloses, further comprising a switch at the detent position that activates said detector when the contact surface is in the detent position [when the prism 2 is in detent position the detector [switch] 5 and support unit 3 contact and the switch is turned on which activates image sensor 6 [detector] to image the fingerprint (page 5, lines 12-21).

As to claim 22, Nishiki further discloses, wherein the contact surface comprises a projection that contacts said switch when the contact surface is in the detent position [support unit 3 is a projection that contacts detector (switch) 5 when the prism 2 is in detent position (page 5, lines 12-21, page 6, lines 1-12).

As to claim 23, Nishiki further discloses, wherein said restraint comprises a spring member with a recess that defines the detent position [the restraint is spring 4 connected to one

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end of the slide unit 3' and connected to support unit 3 that slides in a recess of the slide unit 3' that supports the support unit 3 to be movable (page 4, lines 14-21, page 5, lines 3-9)].

As to claim 24, Nishiki further discloses, wherein the contact surface comprises a projection that fits into said recess when the contact surface is in the detent position [support unit 3 is a projection that fits and slides in a recess of the slide unit 3' that supports the support unit 3 to be movable (page 4, lines 14-21, page 5, lines 3-9, Fig. 1)].

9. Claims 8-10, 12-16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akihiro Shimizu, et al. [Japanese Laid-Open Publication No. 58-201178] in view of Tetsuya Nishiki [Japanese Laid-Open Publication No. 64-68894] as applied to claim 20 above and further in view of Itsumi et al (U.S. Patent 5,559,504). The grounds for rejections stated in paragraph 5 of the Office Action mailed on 9/11/00 paper number 4, are incorporated by reference herein.

10. Claims 17, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akihiro Shimizu, et al. [Japanese Laid-Open Publication No. 58-201178] in view of Tetsuya Nishiki [Japanese Laid-Open Publication No. 64-68894] in view of Itsumi et al (U.S. Patent 5,559,504) as applied to claims 16 and 18 above and further in view of Heinz Lubke (DE 29 52 212). The grounds for rejections stated in paragraph 6 of the Office Action mailed on 9/11/00 paper number 4, are incorporated by reference herein.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akihiro Shimizu, et al. [Japanese Laid-Open Publication No. 58-201178] in view of Tetsuya Nishiki [Japanese Laid-Open Publication No. 64-68894] as applied to claim 20 above and further in view of Tsikos

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(U.S. Patent 4,353,056). The grounds for rejections stated in paragraph 7 of the Office Action mailed on 9/11/00 paper number 4, are incorporated by reference herein.

12. As to claim 25, the limitation “ wherein said spring member comprises a leaf spring that is urged radially outward by said projection when said projection is not in said recess”, no prior art is found to read on the claim as best understood by the Examiner. However the claim would be allowable if it overcomes the 112, first paragraph and rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Samir Ahmed whose telephone number is (703) 305-9870. The examiner can normally be reached on Monday to Friday from 8:00 A.M. to 5:00 P.M.

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The fax number of this Group 2757 is (703) 308-5397 or 308-9051. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Au, Amelia can be reached on (703) 308-6604. The fax phone number for this Group is (703) 306-5406.

SA

SAMIR AHMED
PATENT EXAMINER

2/9/01 , ,


Jon Chang
Primary Examiner